

What is claimed is:

(9) CLAIMS

1. A method for providing data representative of at least one characteristic relevant to viability of a product, the method comprising:
  - monitoring and storing data associated with at least one characteristic associated with a viability state condition of said product;
  - analyzing the data associated with said at least one characteristic;
  - based on said analyzing, predicting at least one future viability state condition of said product related to said data associated with at least one characteristic; and
  - displaying at least one indicator related to said at least one future viability state condition.
2. The method as set forth in claim 1 wherein said at least one indicator is a dynamically alterable viability condition in the form of a current or future date.
3. The method as set forth in claim 1 wherein said at least one characteristic associated with the future viability state condition is related to probability of degradation of the product.

1        4.        The method as set forth in claim 1 wherein said at least one characteristic  
2        associated with the future viability state condition is related to product maturity.

3        5.        The method as set forth in claim 1 wherein said at least one characteristic  
4        associated with the future viability state condition is related to remaining potency of  
5        the product.

6        6.        A product package comprising:  
7                a containment for a product having viability factors;  
8                affixed to said containment, a product viability-related conditions monitoring  
9        device; and  
10               an analysis device for receiving, for storing, and for analyzing said data from  
11        said monitoring device and for transmitting data representative of at least one viability  
12        factor for a product stored within said containment.

13       7.        A monitoring system for monitoring a product having at least one viability  
14        characteristic, the system comprising:  
15               a resealable containment for holding said product;  
16               a data collection device associated with parameters related to viability of said  
17        product; and  
18               a parameters analysis device for analyzing data from said data collection

1 device and for exhibiting at least one product viability conclusion based on said data.

2 8. The system as set forth in claim 7 wherein said data collection device is  
3 configured for attachment to said resealable containment.

4 9. The system as set forth in claim 7 further comprising:  
5 a display is integrated with an environmental control chamber and said data  
6 collection device is releasably connected to said display.

7 10. The system as set forth in claim 7 wherein said data collection device is  
8 resettable.

9 11. Apparatus for predicting and displaying critical time-related information for a  
10 product having at least one viability factor, the apparatus comprising:

11 associated with the product, means for obtaining measurements pertinent to  
12 viability;

13 associated with the means for obtaining measurements pertinent to viability,  
14 means for calculating at least one time-related characteristic for the product; and

15 associated with the means for calculating, means for displaying said at least  
16 one time-related characteristic.

12. The apparatus as set forth in claim 11 wherein said time-related characteristic includes at least one indicator of product expiration.

13. The apparatus as set forth in claim 11 wherein said time-related characteristic includes at least one indicator of product maturity.

14. The apparatus as set forth in claim 11 further comprising:  
means for establishing a remote telecommunications link between said means for obtaining and said means for calculating.

15. The apparatus as set forth in claim 11 further comprising:  
associated with said means for calculating, means for providing rules related to calculating at least one time-related characteristic for the product.

16. The apparatus as set forth in claim 15 wherein said means for providing rules further comprises:  
means for inferring information related to time periods when said product was disassociated from said means for obtaining.

17. The apparatus as set forth in claim 11 wherein said critical time-related information is based upon data related to classification of the product.

1 18. The apparatus as set forth in claim 11 wherein said critical time-related  
2 information is based upon a recorded history of handling and environmental  
3 conditions which substantively affect the product.

4 19. The apparatus as set forth in claim 11 wherein said critical time-related  
5 information is based upon at least one rule related to expiration or degradation of the  
6 product.

7 19. The apparatus as set forth in claim 7 wherein said at least one predetermined  
8 rule is transmitted via a networked link to said means for calculating.

9 20. The apparatus as set forth in claim 11 further comprising:  
10 means for transmitting data related to said viability from a first means for  
11 calculating a time frame related to critical condition data of the product associated  
12 with a first containment to a second means for calculating a time frame related to  
13 critical condition data of the product associated with a second containment for said  
14 product.

15 21. The apparatus as set forth in claim 11 further comprising:  
16 means for calculating and displaying both current status estimates and  
17 measurement histories of said product.

1       22.     A system for providing dynamic viability data for a product having at least one  
2       viability factor, the system comprising:

3             at least one monitoring device wherein at least one specific critical condition  
4       factor associated with maturation and degradation of the product is monitored;

5             at least one storing device wherein data related to said maturation and  
6       degradation is stored;

7             associated with said monitoring device and said storing device, at least one  
8       data processing device wherein said data is analyzed and said dynamic viability data  
9       is calculated; and

10            associated with said data processing device, at least one displaying device  
11       wherein said dynamic viability data is displayed.

12       23.     The system as set forth in claim 22 further comprising:

13             associated with said data processing device, analytical rules providing at least  
14       one rule for calculating the dynamic viability data.

15       24.     The system as set forth in claim 22 further comprising:

16             associated with the data processing device and the monitoring device, at least  
17       one telecommunications device for the data processing device to receive input data  
18       related to said product viability from the monitoring device.

1     25.     A method for predicting and displaying information regarding viability of an  
2     item, the method comprising:

3             associating a time-based history of environmental data and handling data of  
4     the item;

5             substantially continuously compiling the time-based history;

6             based on the time-based history and at least one rule associated with viability  
7     of the item, substantially continuously calculating at least one time reference  
8     associated with the viability; and

9             substantially continuously displaying said at least one time reference.